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ABSTRACT

A study of organizational communication identified two structure roles--liaison and nonliaison--in each of three content-functional areas of organization communication--getting a job done, exploring new behavioral alternatives, and keeping the system functioning--and hypothesized that "liaisons" would perceive themselves in similar ways. Each respondent in the study population of 177 completed three instruments: a communication questionnaire for demographics and self-perception data, a personal contact checklist, and a personal contact questionnaire to elicit perceptions of the communication characteristics of those with whom the respondent reported frequent contact. Personal contact questionnaires were also completed for 844 contact nominations. Reciprocated contacts were entered into matrices by content-function so that groups and liaison agents could be identified. Results of analyses of the data showed that liaisons perceived themselves to have more contacts, to possess more potential influence and more information about the organization, to possess more control over message flow, to feel that the work situation was more open, and to feel more satisfied with the management communication system. In addition a majority of liaisons were found to be administrators. (SH)

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# COMMUNICATION ROLES AND COMMUNICATION CONTENT IN A BUREAUCRATIC SETTING*

by

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## Abstract

This study examined communication linkages perceived by the members of an organization concerning the production, innovation, and maintenance aspects of their work environment. From these reported linkages, networks of communication structure were constructed and the persons serving each of two structural functions identified. These communication-functional roles were compared as to their occurrence within each content-functional network, irrespective of formal organizational rules, and on several variables relating to receipt of work-related information, satisfaction with the management information communication system, perceived control over message flow, and the perceived openness of communication climate.

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* This paper is taken from Dr. MacDonald's Ph.D. dissertation, completed at the Department of Communication, Michigan State University, E. Lansing, Michigan.

## Introduction

With few exceptions, communication research in formal organizations has concentrated on ascribed relationships, positing that certain interactions will or will not occur between particular formally-defined roles.

The communication structure of an organization determines in part how organizational functions are carried out. This structure may be isomorphic with formal expectations such as the organization chart, or it may be sharply divergent from managerial predictions that decisional authority and communication centers must coincide.

Roles are important to the study of human social systems, in that one can both identify the constituent elements of a system and analyze the multiple relational effects deriving from change in any of the elements. Jacobson, Charter, and Lieberman (1951) suggest that analyses of role prescriptions, behaviors, and relationships may enable researchers to predict attitudes, perceptions, and behaviors of system members insofar as they affect the success, failure, adaptability, or rigidity of the organization.

Roles require that incumbents be responsible for agreed-on behaviors and that relationships between roles be more or less stable. Thus, the ideas of structure and role are intimately related. One danger inhering in the view of an organization as the network of social relationships that enables it to conduct its business lies in regarding the described relationships as <u>the</u> structure of the organization. As Katz and Kahn (1966) note, "Organizations are always in the process of change. . . constancy is exaggerated by the fact that the verbal label for describing an organization remains the same even when the processes of organization do not."

The present study, however, suggests that analysis of structure is logically prior to analysis of the flow, or dynamic aspects, of a social system. An analogy may be seen in a school building; while its structure certainly affects what will occur in

the building, it is not identical with what will occur. Still, the latter is conditioned by the former.

The sociometric approach applied to organizational communication by Jacobson and Seashore (1951) permits roles to emerge from process in terms of some set of operating functions, rather than by fiat. This organizational model assumes that an adequate description of communication relationships--hence of organizational structure--will emerge when one defines "what is" by inquiring how people perceive their own and others' communication behavior.

Structure (which is addressed here) enters into the conceptualization of communication flow (which is not addressed here) by defining the position at which a message transaction takes place. Structure, then, is taken to mean the functional relationships among discernible parts of an organization. Flow, on the other hand, refers to the movement of messages through channels in the organization, emanating from and directed toward role-positions.

## Procedures

The present study identified two structural roles--liaison and non-liaison -- in each of three content-functional areas of organizational communication. Schwartz (1968: p. 150) suggested that his examination of communication in an academic setting might have profited from separation of communication "about work" into some more specific categories, enabling the researcher to discern differences between liaison and non-liaison roles according to the content of the communication. Thus, one might determine whether liaison persons serve in single content-functional networks, as Wickesberg (1967) suggests, or across networks.

The content-functional categories applied in this study were suggested in an essay by Berlo (1970: pp. 8-11):

> There are three classes of uses that people make of communication: production, innovation, and maintenance of the social system in which communication occurs. . . . I am suggesting three kinds of functions: getting a job done (production), exploring new behavioral alternatives (innovation), and keeping the system--and its components--functioning (maintenance).

He does not contend that a transaction will be concerned with only one category--quite the contrary. For present purposes, however, isolating communication structures in terms of content demands an artificial separation. One should keep in mind that any single communicative act may include elements of any or all of these functional categories.

Production communication is taken to involve the giving and taking of orders as well as substantive information that facilitates getting the job done. Innovative communication, on the other hand, shuts out some consideration of predetermined positions, inhibits habitual methods of thought and action, and searches for the unique and untried. Maintenance communication differs from the others both substantively and conceptually. For one thing, production and innovative systems often have maintenance subsystems built into them. In Berlo's framework, maintenance includes establishing and changing concepts of self and other, and the generation and control of rules for interpersonal relationships.

The present study cannot accomodate all dimensions of this maintenance concept, and so identifies maintenance primarily to refer to establishment and management of interpersonal relationships, and socialization as to the "rules about the rules" of an organization.

Several investigators have examined the occupants of "linking" roles in organizations. Davis (1953) labeled them "liaison" persons, but failed to operationalize

the term by procedure o r location. Walton (1962) described "magnetic centers" to whom communications are drawn by some characteristics of the occupants. Ross and Harary (1959) went beyond the liaison--non-liaison--isolate trichotomy derived and developed by Jacobson, Seashore, Weiss, and Schwartz, conceiving of linking agents who strengthen or who weaken organizations in which they are found.

Liaison persons were identified in the present study in terms of the structural diversity of their communication contacts, i.e., as analogues to graph theory articulation points, whose removal from the matrix separates communication groups except for single or double links known as bridge contacts. Earlier research (Jacobson and Seashore, 1951; Schwartz, 1968) emphasized the importance of the liaison position as a source of information and of opinion leadership (influence in the organization), and made clear that other members of an organization have relatively clear perceptions of the liaison function in those respects.

To extend these perceptions, and to determine whether liaison persons perceive themselves in similar ways are the general goals of the study reported here.

The method of group and role identification used here is a form of matrix analysis, suggested by Forsyth and Katz (1946) and explicated more fully by Weiss and Jacobson (1955). It provides graphic representation of coded data, showing not only the presence or absence of contact, but the frequency, importance, and topic as well.

While it was expected that groups defined in this way and by the organization chart would overlap, and that some liaison persons would be predicted by the formal structure, neither is a requirement. Among the possible explanations for disjunction of formal roles or groups and those which are communication-defined would be the existence of a kind of "system openness" that encourages group members to deal directly with whatever individuals or groups are found to be functional for job accomplishment.

Work groups have been defined in terms of communication contacts alone (Jacobson and Seashore, 1951), or with the added proviso that groups are what remain after liaison persons are removed from the sociometric matrix (Schwartz, 1968). Festinger, et al., (1950), required completely interconnected triads as the basis for group definition. Another possibility is to define boundaries by a ratio where in-group choices exceed out-group choices. The present study follows the Weiss and Jacobson procedure, identifying the work group (or communication clique) as a matrix segment in which no member has more than one nonliaison contact outside the segment.

The liaison person is defined as having at least two contacts in work groups other than his own, or having contacts in several groups without a majority in any one group. A major function of this role seems to be that of relating important elements, however defined. Ross and Harary (1955: pp. 257-258) comment on the importance of the role:

> Positions in an organization which appear as articulation points in the graph of an organizational structure may be viewed as having special static and dynamic properties. From a static viewpoint, a liaison person is crucial because his loss destroys the connected unity of the organization. . . . The critical nature of the liaison person for the dynamic or flow functions of an organization arises from his non-substitutability in paths. For example, if a liaison person is a 'bottleneck' the organization suffers badly, while if he is efficient he tends to expedite the flow of the entire organization.

The member of a group who is not a liaison person is termed a nonliaison group member. Jacobson and Seashore found that 20% of their subjects were liaison persons, and that all but one of the remainder were nonliaison group members. Schwartz, on the other hand, found that 15% of his subjects were liaison persons, 13% were isolates, and most of the others nonliaison group members. The single isolate found by Jacobson and Seashore was a visitor to the organization; those found by Schwartz were similar--temporary staff or visitors. Strictly applied, the concept of isolate means that a

person neither chooses nor is chosen; practically, it is more useful to apply the label to persons who have few, infrequent, unreciprocated contacts. Given the stricter definition, it is not surprising that no isolates were identified in the mature organization observed in the present study.

Each respondent in the study population was asked to complete three instruments: (1) a Communication Questionnaire (CQ) providing demographic and self-perception data on issues relevant to this and the larger study of which it was part; (2) a Personal Contact Checklist (PCC) of the names of people within the organization with whom the respondent communicated, indexed by content, importance and frequency; and (3) a Personal Contact Questionnaire (PCQ) eliciting perceptions of the communication characteristics with whom the respondent reported frequent contact. Of the 185 population members, 179 completed the Communication Questionnaire (177 were useable) and Personal Contact Checklist. Personal Contact Questionnaires were completed from the 875 contact nominations listed as daily or more frequent (844 were useable).

Information from the PCCs was entered into matrices--the frequent contacts reported by each person. Reciprocated nominations were determined by rotating the matrix and entering these other contact reports, and thus completed second-stage matrices; the network and other empirical analyses were based on these matrices containing only reciprocated nominations.

In all, there were 986 reciprocated nominations, 588 in the production communication matrix. Thus, there were 493 communication dyads over the three matrices, 294 in the production matrix alone.

Reciprocated contacts were entered into the matrices so that a respondent's contacts were grouped as close together as possible. This resulted in the isolation of 62 communication groups; these groups, in turn, yielded identification of 21 liaison

persons in the production communication matrix, five in the innovation communication matrix, and two in the maintenance communication matrix. Since two persons were found to serve the liaison function in more than one matrix, the actual total was 26 liaison persons.

In constructing the matrices, respondent code numbers were listed by alphabetical order of the respondents, down one side and across the top of each matrix. There were two reasons for entering people in alphabetic order, rather than according to the organization chart as suggested by Weiss and by Schwartz. The procedure followed facilitated coding instruments during the data-checking phase of the study, and it was possible to test the possible biasing effects of starting from a non-random order. One matrix segment was analyzed four times, each time using a different, randomly selected respondent as the starting point, to further test outcomes of order. Results were identical in terms of membership in the communication groups and liaison person identification. Differences did occur in the number of iterations required to most closely group members around the diagonal of the matrix, as required by the method. Therefore, one can accept Weiss's procedures, both in terms of accuracy and of time-saving. Manual manipulation of the matrices required about 120 man-hours, as predicted by Weiss.

Data for testing hypotheses were taken from the CQs completed by all liaison persons and by 47 nonliaisons in frequent reciprocated contact with them, and by PCQs completed by each group on the other.

Because the population was censused, the conditions for the usual tests of statistical significance of differences did not apply. The position adopted in the present study is discussed by Lipset, Trow and Coleman (1953: pp. 478-485):

> Further studies upon different organizations will constitute more reliable confirmation, for they test the hypotheses in a different population, which a (chi square) test used on this data could never do . . . . Even if all assumptions for such tests were fulfilled, the population to which the result is generalized is not the population from which the sample was drawn. It is a theoretical population, of all men in certain kinds of organizations.

Therefore, in the present study, differences were described without assigning levels of statistical significance to the differences.

## Conclusions

Number of Communication Contacts. The crux of concern in this study is whether liaison persons perceive themselves to possess the structural characteristics that their nonliaison contacts perceive them to have, as measured by comparing self- and other perceptions.

The first hypothesis stated that liaison persons would perceive themselves to have more communication contacts than their nonliaison co-workers. While the definition of the liaison role demands sociometrically diverse contacts, it does not specify that liaison persons will contact more other people. Schwartz (1968: p. 135) found that the nonliaison members of his population did perceive liaison persons to have communication contact with more people than did nonliaisons' other non-liaison contacts. The present study supports the proposition that liaison persons also perceive themselves to have more contacts than nonliaison persons.

Influence in the Organization. The second hypothesis, too, acted to test perceptions that liaison persons held of their own communication position in the organization. This prediction stated that liaison persons would view themselves as possessing more potential influence in the work setting than their nonliaison contacts. As with the first hypothesis, the prediction was based on perceptions that liaison

members had of themselves in relation to their communication contacts, rather than the perceptions held of liaison members of the population, by others. The data supported the prediction.

Possession of Work-Related Information. Two hypotheses were posited, one dealing with perceptions held by one's communication contacts and the other with perceptions of one's own level of information. The first of these, that nonliaison persons would perceive their liaison contacts to have more work-related information, received support.

The corollary, that the 26 liaisons would perceive themselves to possess more such information, received minimal support. Because the standard deviation of scores on liaison perception of nonliaison levels of information was half again as large as that for liaison self-perceptions, the small observed mean difference may not indicate any real difference.[1]

Possession of Non-Production Information. The item used to elicit information about these two hypotheses described the nature of communication involved as "not related to work--what's going on within the agency, who works well with whom, who's happy here and who's not, etc."

Hypothesis 4 utilized reports from nonliaisons on their liaison contacts, with the expectation that liaisons would be perceived to posses more non-work information thannonliaisons perceived themselves to know. The hypothesis was supported.

The corollary, that liaison persons would also perceive themselves to possess more non-work information, was not supported. The observed mean difference was clearly in the opposite direction, indicating the liaisons perceived their nonliaison contacts

1. Since the possible range for indexes, from 5 to 20, and the number of persons used as data bases, 26 to 55, rendered simple reporting of means suspect, a statistic was created that would indicate how much scores differed between groups in relation to how much they could differ. The mean difference between group scores was divided by the average standard deviation between groups to produce a range-free index of difference, "Support," then, indicates any difference, by this statistic, when in the predicted direction. "Minimal" refers to statistic values so low as to be very near zero. Where "minimal" support is indicated, the conclusions should be skeptically interpreted.

to have more such information than themselves. Since two-thirds of the liaisons identified were also found to hold positions of formal authority, the observed difference may indicate that office and section heads in this organization repose considerable confidence in the knowledge levels of their technical and advisory staff members--at least on this category of information.

Control of Message-Flow. The obtained mean difference, corrected to the statistic described above, supported the hypothesis that liaison persons would be viewed as possessing more control over message flow than nonliaisons possessed.

Hickey (1968) found that network members in a laboratory situation who were seen as having high control over message content, timing, and distribution channel were also seen as having high influence in the network. Hypothesis 6 was designed as a partial test of this proposition in a formal organization. The index scales for control of message flow and for organizational influence, based on the perceptions of liaison and nonliaison persons reporting frequent contact, became data for computation of a product-moment correlation coefficient. The obtained value of $r_{xy}$, .57, explains about a third of the variance. Therefore, the hypothesis is supported.

Perceived System Openness. Hypothesis 7 predicted that liaison persons would feel that the work-related communication system was more open than nonliaison persons would perceive it to be, on the dimensions of supportive supervisors and the free exchange of ideas and information. The hypothesis was supported.

Communication System Satisfaction. The prediction of Hypothesis 8, that liaison persons would feel more satisfied with the management communication system than nonliaisons would feel themselves to be, was given strong support, with the observed differences clearly in the predicted direction. The aspects of communication measured were accuracy, credibility, completeness, and utility of work-related communication from top management.

Content and Communication Role. It was hypothesized that the liaison role would be widely distributed in each of the three communication-functional networks. However, only two maintenance communication liaison persons were identified, one of those serving also as a liaison person in the innovation communication network. Five liaison persons were identified in the innovation communication network--one serving in dual capacity as noted, and another performing also as a production communication liaison person. This distribution precluded useful comparison of the relationships of official position to the liaison communication role across the three networks.

The hypothesis stated that production network liaison persons would be more likely to hold official supervisory positions than would liaisons in the other networks. Of the 26 persons identified in this role, 70% (19) held official supervisory positions. This was true for three of the five persons identified as liaisons in the innovation network and for both liaisons in the maintenance communication network. Of the 21 liaisons in the production communication network, 67% (14) held official supervisory posts. On the basis of these findings, it is considered that the hypothesis is partially supported.

Additional Findings. Respondents in this study made almost 17 frequent communication nominations apiece, on the average, compared with 12 per respondent in the Jacobson and Weiss study and the seven per respondent in Schwartz's examination of a college faculty. Liaison persons nominated more people than did nonliaisons at every contact frequency: 4.77 for liaisons and 2.69 for nonliaisons at the "more than once a day" frequency; 3.50 versus 1.74 at the "once a day" frequency; and 7.73 versus 4.24 at the "once or twice a week" level.

Liaison members also received more contact nominations than their nonliaison co-workers; the mean over-all frequencies of contact was 12.69 for liaison persons and 6.30 for non-liaisons.

And there was evidence that, in this organization at least, one cannot become a liaison person at all until some threshhold of tenure has been reached; no-one with less than five years was identified as a liaison person, although about 20% of the population had been there five years or less.

## Discussion

The study design places limitations on interpretation of findings. The most important limiting factors were: (1) the study population was selected for availability, and was in no way random; (2) even then, were there a well-defined larger conceptual population, a case could be made for the use of statistical inference--but no such population was definable; and (3) within the organization studied the applicable population was censused, removing from consideration a third level at which a probability model might have been applied. Replication, of course, would be the test.

As Schwartz noted (1968: p. 145), the phenomenonological nature of the data imposed a further limitation, in that the relationships between perceived and reported behavior may have induced distortions. While there was no widespread evidence of artificial inflation or of responding only at the mean, to the degree that either was present one must have less confidence in the findings. However, this weakness is shared by virtually all studies and experiments that rely on respondents to provide data voluntarily.

One category of member was not examined in any of the studies to date. It appears to this author that the "bridge" contact may often have many of the characteristics of the liaison person. In fact, it may be most useful to conceive of a continuum, with liaison-high at one end and nonliaison group member at the other. High-contact bridge members might account for the lack of support of hypotheses about possession of different types of information.

Earlier, it was noted that managers expect decision and communication centers to coincide. The expectation was generally confirmed in this study, but not entirely. Schwartz expressed concern that the diversity of contacts that nonliaison staff members perceived liaison persons to have might be ascribed to the administrative posts held by many of the liaisons. The present study could not determine whether administrators should have more diverse contacts, but it did determine that some top level administrators did not function in the liaison role.

This may be the result of conscious managerial style, or it may be regarded as undesirable by the administrators concerned. That thisstate was perceived as undesirable by the administrators concerned became evident from frequent comments of organization members that the agency director had isolated himself from meaningful contact with members of his executive staff; the director was not selected as a liaison person.

At the same time, the study did determine that a majority of liaison persons are administrators, and that they appear to be aware of the importance of their communication role in the organization.

The practical implication of this, admittedly anecdotal, evidence is that while the transmission loops for management communications may occasionally encompass most of the organization, the feedback loops are inordinately restricted. That is, the organization has provided little or no means for taking into account cognitive or affective expressions for the planning of future management communications.

The three content-functional communication networks differed markedly in size, from 166 about production matters to 71 for maintenance matters. However, all members of the maintenance communication network except one were also members of the innovation network; in turn, all but two members of the innovation communication network were also members of the production communication network.

Despite this, there was little overlap in terms of liaison persons. Given these data, one may conclude that there is a single large network, of which subsets are activated for different content-functional matters. With so few unique members, the concept of separate communication networks is uncertain at best.

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